

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
122	108	Lower middle	LCN	6.3	35.8	5,682.7	n/a
				Score/Value	Rank		
INSTITUTIONS				52.5	101		
1.1	Political environment		38.8	109			
1.1.1	Political and operational stability*		54.4	111			
1.1.2	Government effectiveness*		31.1	107			
1.2	Regulatory environment		58.0	88			
1.2.1	Regulatory quality*		23.9	108			
1.2.2	Rule of law*		29.3	100			
1.2.3	Cost of redundancy dismissal, salary weeks		14.9	60	●		
1.3	Business environment		60.5	104			
1.3.1	Ease of starting a business*		79.8	109			
1.3.2	Ease of resolving insolvency*		41.1	93			
HUMAN CAPITAL & RESEARCH				11.7	[118]		
2.1	Education		22.8	[120]			
2.1.1	Expenditure on education, % GDP		4.3	67			
2.1.2	Government funding/pupil, secondary, % GDP/cap.Ⓞ		7.3	102	○ ◇		
2.1.3	School life expectancy, years		n/a	n/a			
2.1.4	PISA scales in reading, maths, & science		n/a	n/a			
2.1.5	Pupil-teacher ratio, secondary.Ⓞ		30.8	107	○ ◇		
2.2	Tertiary education		n/a	[n/a]			
2.2.1	Tertiary enrolment, % gross		n/a	n/a			
2.2.2	Graduates in science & engineering, %		n/a	n/a			
2.2.3	Tertiary inbound mobility, %		n/a	n/a			
2.3	Research & development (R&D)		0.7	112			
2.3.1	Researchers, FTE/mn pop.		n/a	n/a			
2.3.2	Gross expenditure on R&D, % GDP.Ⓞ		0.1	106			
2.3.3	Global R&D companies, avg. exp. top 3, mn US\$		0.0	43	○ ◇		
2.3.4	QS university ranking, average score top 3*		0.0	78	○ ◇		
INFRASTRUCTURE				33.6	106		
3.1	Information & communication technologies (ICTs)		36.0	113	◇		
3.1.1	ICT access*		43.6	99			
3.1.2	ICT use*		21.3	105			
3.1.3	Government's online service*		40.3	114	◇		
3.1.4	E-participation*		38.8	112	◇		
3.2	General infrastructure		33.1	70			
3.2.1	Electricity output, kWh/mn pop.		746.3	100			
3.2.2	Logistics performance*		n/a	n/a			
3.2.3	Gross capital formation, % GDP		28.1	29	●		
3.3	Ecological sustainability		31.7	87			
3.3.1	GDP/unit of energy use		7.9	78			
3.3.2	Environmental performance*		55.0	82			
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..		0.4	90			
MARKET SOPHISTICATION				39.1	105		
4.1	Credit		29.0	97			
4.1.1	Ease of getting credit*		50.0	87			
4.1.2	Domestic credit to private sector, % GDP		42.6	78			
4.1.3	Microfinance gross loans, % GDP		1.1	18	●		
4.2	Investment		35.0	[99]			
4.2.1	Ease of protecting minority investors*		35.0	123	○ ◇		
4.2.2	Market capitalization, % GDP		n/a	n/a			
4.2.3	Venture capital deals/bn PPP\$ GDP		n/a	n/a			
4.3	Trade, competition, & market scale		53.3	95			
4.3.1	Applied tariff rate, weighted avg., %		2.3	57	● ◆		
4.3.2	Intensity of local competition*		60.3	106	◇		
4.3.3	Domestic market scale, bn PPP\$		35.8	109	◇		
BUSINESS SOPHISTICATION				27.9	80		
5.1	Knowledge workers		41.3	[52]			
5.1.1	Knowledge-intensive employment, %		13.8	92			
5.1.2	Firms offering formal training, % firms		57.3	11	● ◆		
5.1.3	GERD performed by business, % GDP		n/a	n/a			
5.1.4	GERD financed by business, %		n/a	n/a			
5.1.5	Females employed w/advanced degrees, %		6.1	84			
5.2	Innovation linkages		15.9	116			
5.2.1	University/industry research collaboration*		27.1	115			
5.2.2	State of cluster development*		33.7	113			
5.2.3	GERD financed by abroad, %		n/a	n/a			
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP		0.0	102			
5.2.5	Patent families 2+ offices/bn PPP\$ GDP		0.0	93	○ ◇		
5.3	Knowledge absorption		26.5	96			
5.3.1	Intellectual property payments, % total trade		0.0	111	◇		
5.3.2	High-tech imports, % total trade		8.1	57	●		
5.3.3	ICT services imports, % total trade		0.3	117	◇		
5.3.4	FDI net inflows, % GDP		6.9	19	●		
5.3.5	Research talent, % in business enterprise		n/a	n/a			
KNOWLEDGE & TECHNOLOGY OUTPUTS				7.9	122	○ ◇	
6.1	Knowledge creation		1.7	125	○		
6.1.1	Patents by origin/bn PPP\$ GDP.Ⓞ		0.0	124	○		
6.1.2	PCT patents by origin/bn PPP\$ GDP		0.0	84			
6.1.3	Utility models by origin/bn PPP\$ GDP		n/a	n/a			
6.1.4	Scientific & technical articles/bn PPP\$ GDP		1.1	122	○		
6.1.5	Citable documents H-index		2.9	113			
6.2	Knowledge impact		4.6	[122]			
6.2.1	Growth rate of PPP\$ GDP/worker, %		n/a	n/a			
6.2.2	New businesses/th pop. 15-64		n/a	n/a			
6.2.3	Computer software spending, % GDP		0.1	98			
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP		1.7	90			
6.2.5	High- & medium-high-tech manufactures, %		n/a	n/a			
6.3	Knowledge diffusion		17.5	65	●		
6.3.1	Intellectual property receipts, % total trade		n/a	n/a			
6.3.2	High-tech net exports, % total trade		0.2	99			
6.3.3	ICT services exports, % total trade		2.6	39	●		
6.3.4	FDI net outflows, % GDP		0.5	67	●		
CREATIVE OUTPUTS				16.3	[110]		
7.1	Intangible assets		30.8	104			
7.1.1	Trademarks by origin/bn PPP\$ GDP.Ⓞ		40.2	65			
7.1.2	Industrial designs by origin/bn PPP\$ GDP.Ⓞ		0.0	116	○		
7.1.3	ICTs & business model creation*		48.9	110			
7.1.4	ICTs & organizational model creation*		43.0	100			
7.2	Creative goods & services		2.1	[115]			
7.2.1	Cultural & creative services exports, % total trade.Ⓞ		0.0	97			
7.2.2	National feature films/mn pop. 15-69.Ⓞ		0.3	100	○		
7.2.3	Entertainment & Media market/th pop. 15-69		n/a	n/a			
7.2.4	Printing & other media, % manufacturing		n/a	n/a			
7.2.5	Creative goods exports, % total trade		0.3	71			
7.3	Online creativity		1.6	[90]			
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69		2.8	68	● ◆		
7.3.2	Country-code TLDs/th pop. 15-69		0.5	94			
7.3.3	Wikipedia edits/mn pop. 15-69		n/a	n/a			
7.3.4	Mobile app creation/bn PPP\$ GDP		n/a	n/a			

NOTES: ● indicates a strength; ○ a weakness; ◆ an income group strength; ◇ an income group weakness; * an index; † a survey question. Ⓞ indicates that the economy's data are older than the base year; see Appendix II for details, including the year of the data, at <http://globalinnovationindex.org>. Square brackets [] indicate that the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level.